



The world takes a big step forward in the battle against climate change on November 4. On that historic day, the Paris Agreement will come into force.

THE PARIS AGREEMENT

The Paris Agreement is a **universal** climate change treaty designed to slow global warming – a man-made worldwide temperature increase that is threatening our way of life, and ultimately, all life on our planet.

This historic international treaty was adopted last December at the **United Nations (UN)** Climate Change Conference in Paris. Some 195 countries, including Canada, negotiated the terms of the pact.

The goal is to keep the global temperature increase below 2 degrees Celsius above **pre-industrial** levels. That's the threshold that most

scientists see as a dangerous tipping point for the planet.

MAKING HISTORY

On April 22, 2016—Earth Day—175 nations met at the UN in New York to sign the Paris Agreement. It was the biggest single-day signing ceremony in history.

Signing the pact, however, was largely symbolic. The treaty would not become legally binding until 30 days after it was **ratified** by at least 55 countries representing over 55 percent of global **greenhouse gas emissions**.

TIME FOR CHANGE

Technically, each country had one year from the signing to take the treaty home to its government, formulate a plan and deliver its individual commitment to tackling climate change to the United Nations. However, **UN Secretary General Ban**

Ki-moon encouraged governments to ratify the agreement as quickly as possible.

“We are in a race against time,” he said.

CARBON COOPERATORS

China and the United States, the world's two largest polluters, formally approved the agreement on September 3. Together, they represent 38 percent of emissions. Then, on October 5, Canada, the European Union and nine other countries joined, tipping the balance over the 55 percent mark. The Secretary General was thrilled.

“This is a momentous occasion,” Ban Ki-moon said. “I am delighted to announce that the Paris Agreement will enter into force on November 4, 2016. What once seemed unthinkable, is now unstoppable.”

DEFINITIONS

GREENHOUSE GAS EMISSIONS: any gaseous compound in the atmosphere that is capable of absorbing infrared radiation, thereby trapping and holding heat in the atmosphere. By increasing the heat in the atmosphere, greenhouse gases are responsible for the greenhouse effect, which ultimately leads to global warming.

PRE-INDUSTRIAL: before machines, manufacturing, and the mass use of fossil fuels to run them

RATIFY: sign or give formal consent to a treaty, contract, or agreement, making it officially valid

UN SECRETARY GENERAL: the head of the United Nations

UNITED NATIONS: an organization encouraging peace, cooperation, social progress and economic stability. Created after World War II, it has 193 members, including Canada.

UNIVERSAL: involving or affecting everyone



“Now we must move from words to deeds and put Paris into action. We need all hands on deck – every part of society must be mobilized to reduce emissions and help communities adapt to inevitable climate impacts.”

CANADA’S COMMITMENT

For its part, Canada has committed to reducing its greenhouse gas emissions by 30 percent from 2005 levels by 2030.

DID YOU KNOW?

As part of its obligations under the Paris Agreement, Canada has also pledged to contribute \$2.65 billion to help poorer countries meet their own targets.

To accomplish this, on October 3, Prime Minister Justin Trudeau announced that each province and territory will be required to set a carbon price that starts at a minimum of \$10 a tonne in 2018, and rises by \$10 each year to \$50 a tonne by 2022.

WHAT IS CARBON PRICING?

Carbon pricing means charging companies and households for their carbon – or greenhouse gas – emissions, measured by the tonne. It’s a way to encourage people to pollute less. It also generates government revenue that can then be invested in cleaner technologies or used to reward greener habits with tax **incentives** or other measures.

There are two main ways to price carbon. One is by setting a carbon tax, and the other is by implementing a system called cap-and-trade.

A carbon tax is a surcharge added to carbon fuels such as gas and oil. It is direct, fast and easy to put in place.

The higher the tax, the less carbon people are likely to produce and the more the price gap narrows between fossil fuels and renewable energy like solar and wind. Then as renewable energy becomes more affordable, more people start to use it, lowering the price of eco-friendly products even further.

Under cap-and-trade, the government sets a limit on how many emissions can be released by all companies collectively in a year. Then, it assigns each business a portion of this total, and issues it credits for this amount. Companies that don’t use all of their credits can sell them to another company. Companies that want or need more than they were assigned can buy them from others.

This system rewards energy-efficient companies and punishes polluters. Emissions are reduced because the cap is lowered each year. However, cap-and-trade is more complicated than a carbon tax and takes longer to implement. It requires **regulations** and an emissions-trading market.

WHAT’S NEXT?

The provinces and territories will be able to decide what form of carbon pricing to bring in. B.C. already has a \$30 per tonne carbon tax in place, and Alberta will bring one in next year. Meanwhile, Quebec implemented a cap-and-trade system in 2002, and Ontario is following suit next year.

The other provinces and territories have until 2018 to bring in their carbon price plans. Otherwise, Mr. Trudeau says the federal government will do so on their behalf.

“There is no hiding from climate change,” the Prime Minister says. “It

WHAT CAN YOU DO?

There are some key steps you and your family can take to help slow climate change:

1. Support your governments – local, provincial or territorial, and federal. Write to your representatives with your suggestions or just to let them know you want them to keep working on ways to tackle climate change.
2. Some 25 percent of Canada’s greenhouse gas emissions come from transportation. Instead of driving, take public transit, walk or ride a bike. Fly less, and if an electric or hybrid car is an option for you – use it.
3. Keep your house a little cooler in the winter and a little warmer in the summer. Seal cracks in walls, doors and windows, and use compact fluorescent or LED light bulbs.
4. Eat less red meat – it takes a lot more energy to raise one kilogram of red meat than the same amount of chicken, pork, grain or vegetables. Buy local whenever possible so that your food hasn’t had to travel as far. And waste less food overall.
5. Use less energy. Unplug devices when they’re charged, hang-dry clothes, spend less time watching TV or using the computer, and invest in energy-efficient appliances. Is installing solar panels a possibility? If yes, do it!

is real and it is everywhere. We cannot undo the last 10 years of inaction. What we can do is make a real and honest effort — today and every day — to protect the health of our environment, and with it, the health of all Canadians.” ★

DEFINITIONS

INCENTIVE: something that makes a person want to work or do something

REGULATION: an official rule or law that says how something should be done



NATIONAL

TURNING DOWN THE HEAT

ON THE LINES

Answer the following in complete sentences:

1. Explain what **global warming** is.

2. Describe the global warming treaty that was negotiated last December.

3. How many countries must ratify the treaty before it comes into effect?

4. When did this treaty obtain the necessary number of signatures?

5. What has Canada committed to do under this treaty?

6. Explain what **carbon pricing** is.

7. Describe how the federal government plans to achieve the targets under the Paris Agreement.

8. Explain what a **carbon tax** is and how it works.

9. Explain what **cap-and-trade** carbon pricing is and how it works.



BETWEEN THE LINES

An **inference** is a conclusion drawn from evidence. A *plausible inference* is supported by evidence in the article and is consistent with known facts outside of the article.

What inference(s) can you draw from the fact that 195 countries were involved in negotiating the Paris Agreement?

BEYOND THE LINES

Divide your classroom into groups and have each one select a means of generating electricity that produces less CO₂ than fossil fuels (wind, solar, nuclear, fusion, tidal, etc.). After researching the technology, have each group argue persuasively that theirs is the best investment for combatting climate change.

JUST TALK ABOUT IT

1. As you see it, what is the significance of the Paris Agreement? Explain.
2. a) What is your understanding of the term ‘carbon pricing’? Explain.
b) What are the similarities and differences between a carbon tax and cap-and-trade?
- c) What inferences can you draw from the fact that B.C. and Alberta already have, or are planning, a carbon tax and Quebec and Ontario already have, or are planning, a cap-and-trade system?

ONLINE

Note: The links below are listed at www.lesplan.com/en/links for easy access.

1. Watch the trailer for Leonardo DiCaprio’s new documentary, Before The Flood, at <https://www.youtube.com/watch?v=6UGsRcxaSAI>
2. Learn from environmental icon David Suzuki what you can do to reduce your carbon footprint at <http://www.davidsuzuki.org/what-you-can-do/reduce-your-carbon-footprint/?gclid=COPnq9iYhr4CFZNI0godNVYAkA>
3. Watch “Leonardo DiCaprio (UN Messenger of Peace) at the opening of Climate Summit 2014 at https://www.youtube.com/watch?v=vTyLSr_VCcg
4. Access a TED Talk playlist of ten videos about climate change at http://www.ted.com/playlists/78/climate_change_oh_it_s_real?utm_source=newsletter_daily&utm_campaign=daily&utm_medium=email&utm_content=playlist__2015-11-18playlist_button
5. Learn the basic science of climate change in 24 easy steps by watching the video “Climate Science: What You Need To Know” at <https://www.youtube.com/watch?v=ffjIyms1BX4> ★